DUST COLLECTING APPARATUS AND AIR-CONDITIONING APPARATUS

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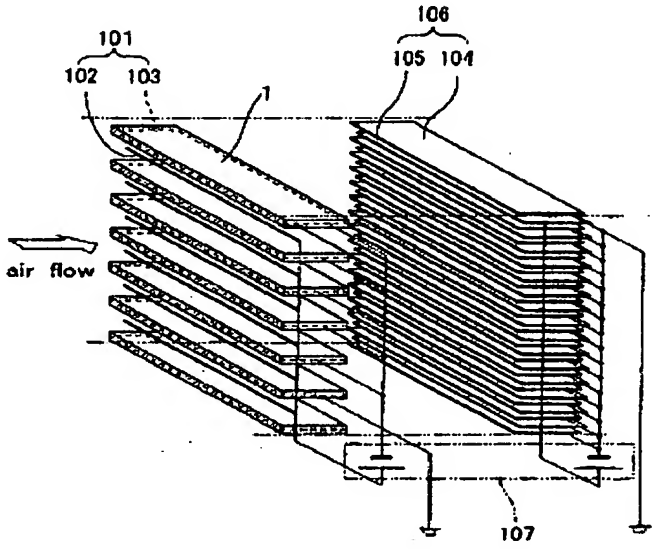
Abstract of **EP1175943**

A dust is electrostatically charged using an ion-releasing means adapted to release only ionized air with occurrence of a corona discharge, thereby reducing the amount of power consumed and the amount of ozone generated to the utmost. An electric dust collector includes a charging section comprising a discharging electrode and an earthed electrode, a dust-collecting section comprising a voltage-applied electrode and an earthed electrode and an air feed fan. A dust introduced into the dust collector is electrostatically charged by breaking the air insulation by a corona discharge occurring in the charging section to produce ionized air and then removed in the dust-collecting section where an electric field is formed. However, because the corona discharge is generated, there is a problem that the discharged current is large, and the amount of power consumed and the amount of ozone generated are large.

FIG. 1



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Abstract

A dust is electrostatically charged using an ion-releasing means adapted to release only ionized air with occurrence of a corona discharge, thereby reducing the amount of power consumed and the amount of ozone generated to the utmost. An electric dust collector includes a charging section comprising a discharging electrode and an earthed electrode, a dust-collecting section comprising a voltage-applied electrode and an earthed electrode and an air feed fan. A dust introduced into the dust collector is electrostatically charged by breaking the air insulation by a corona discharge occurring in the charging section to produce ionized air and then removed in the dust-collecting section where an electric field is formed. However, because the corona discharge is generated, there is a problem that the discharged current is large, and the amount of power consumed and the amount of ozone generated are large.